

*an / 56*S/078/t /00674741414
B'2'/B2w721.2500AUTHORS: Savitskiy, Ye. M., Terekhova, V. F., Borov, I. V., and
Markova, I. A.TITLE: The phase diagram of the compounds of the magnesium-
gadolinium systemPERIODICAL: Zhurnal neorganicheskoy khimii, v. 6, no. 1, 1961.
1734 - 1737

TEXT: The phase diagram of the compounds of the system Mg-Gd was drawn up on the basis of physico-chemical analyses (determination of the microstructure, hardness and microhardness, thermal and X-ray studies). The alloys were produced from distilled Mg (99.99 %) and metallic Gd (99 %). The alloy with 28 % by weight Gd forms a eutectic at 54 \pm 2°C. The existence of four chemical compounds, i.e., Mg_3Gd , Mg_2Gd , Mg_7Gd and $MgGd$ was proved on the basis of microstructural and X-ray analyses. The compounds Mg_3Gd (68.2 % by weight Gd) and $MgGd$ (86.2 % by weight Gd) have a cubic lattice with the parameters 7.35 \AA and 7.77 \AA . The

Card 1/3

L730
S/078/6/306/017/014/714
B'21/B20"

The phase diagram of...

compound Mg_2Gd (78 % by weight Gd) has a cubic structure of the $MgCa_2$

type. In alloys which are richer in Gd, the existence of the compound $MgGd_2$ is also assumed. The solubility of Gd in Mg at the eutectic temperature amounts to 2 - 2.5 % by weight Gd. The solubility at the temperature is not higher than 1.5 % by weight Gd. The solubility of Gd in solid Gd was not determined owing to insufficient purity of the latter metal. An addition of Gd to Mg increases the stability of the latter. The hardness of the alloy with 7 % by weight Gd was 400 kg/mm². Ye. N. Kunenkova made the chemical analysis of the alloys. F. I. Kripyakevich assisted in the X-ray analysis.

There are 2 figures and 5 references: 3 Soviet-bits and 2 non-Soviet-t. or

ASSOCIATION: Institut metallurgii im. A. A. Baykova Akademii nauk SSSR
(Institute of Metallurgy imeni A. A. Baykova of the Academy of Sciences USSR)

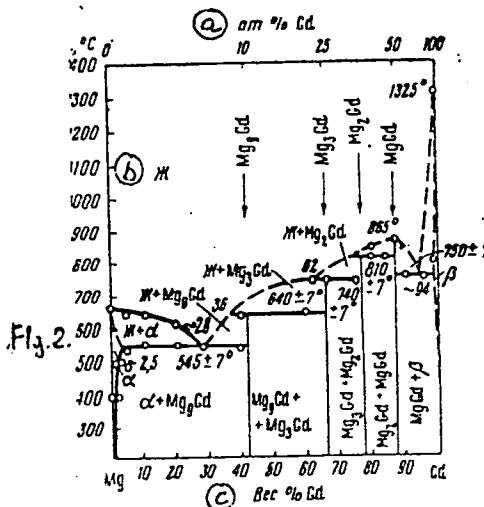
SUBMITTED: January 28, 1961

Card 2/3

S/078/61/006/007/014/014
B121/B207

The phase diagram of...

Legend to Fig.2: a) atom % Cd;
b) liquid; c) % by weight Cd.



Card 3/3

SAVITSKIY, Ye.M., doktor khim.nauk, prof.; TEREKHOVA, V.F., kand.tekhn.nauk;
MARKOVA, I.A., inzh.; FILIMONOVA, R.F., inzh.

Interaction of yttrium with other metals. Metalloved. i term. obr.
met. no.9:42-49 S '62. (MIRA 16:5)

1. Institut metallurgii imeni A.A.Baykova.
(Yttrium alloys—Metallography) (Phase rule and equilibrium)

SAVITSKIY, Yevgeniy Mikhaylovich, prof., doktor khim. nauk;
TEREKHOVA, Vera Fedorovna; Burov, Igor' Vladimirovich;
MARKOVA, Inessa Aleksandrovna; NAUMKIN, Oleg Pankrat'yevich;
MUKHIN, G.G., red.izd-va; GUSEVA, A.P., tekhn. red.

[Rare-earth metal alloys] Splavy redkozemel'nykh metallov. Mo-
skva, Izd-vo Akad. nauk SSSR, 1962. 266 p. (MIRA 15:12)

1. Laboratoriya redkikh metallov i splavov Instituta metallurgii
im.A.A.Baykova (for all except Mukhin, Guseva).
(Rare earth metals)

I-1287-63

EWT(n)/EWT(m)/EDS

AFITIG/ASD

JD/JG

ACCESSION NR.: AP3004355

5/07/86/008/008/1991/1993

AUTHOR: Terekhova, V. F.; Markova, I. A.; Savitskiy, Ye. M.

61

60

TITLE: Phase diagram of alloys of the yttrium-tin systemSOURCE: Zhurnal neorganicheskoy khimii, v. 8, no. 6, 1963, 1991-1993TOPIC TERMS: yttrium-tin system, yttrium-tin-system phase diagram, yttrium-tin-mutual solubility, yttrium-tin compound, yttrium-tin-alloy brittleness, yttrium-tin-alloy oxidation

ABSTRACT: Sixteen Y-Sn alloys with 0 to 100% Sn were melted from 99% pure Y and 99.9% pure Sn in an arc furnace in a helium atmosphere. The alloys were vacuum-sealed; Y-rich alloys (up to 50 wt% Sn), for 150 hr at 1200°C; alloys with 40–70 wt% Sn, for 150 hr at 1000°C; and Sn-rich alloys (up to 25 wt% Y), for 200 hr at 200°C. Results of metallographic, x-ray diffraction, and thermal analyses and hardness tests were used as a basis for plotting the phase diagram of the system (see Fig. 1 of Enclosure). Alloys with 40–75 wt% Sn oxidize readily in air and are very brittle.⁶⁰ On the Sn side there is probably a pseudobinary close to pure Sn. Microscopic and x-ray diffraction-pattern examination (the latter

Cont. 1/2

L14207-6
ACCESSION NO.: AP5004555

carried out by P. I. Kripyakovich) indicates a possibility of the existence of two compounds whose structure has not yet been determined. The solubility of Sn in solid Y does not exceed 1 wt%. The maximum solubility of Y in solid Sn is 0.3 wt%. Orig. art. has: 2 figures.

ABSTRACT DATE: 1966

NUMBERED: 1200063

INDEX ACT: 214-063

REFL: 01

SUB CODE: 100

DO DOB Sov: 001

OTHER: 001

Card 2/12

L 14417-63 EWP(q)/EWT(m)/BDS AFTTC/ASD MH/JD/JG

ACCESSION NR: AP3004357

8/0078/63/008/008/1998/2000

AUTHOR: Martova, I. A.; Turekova, V. F.; Savitskiy, K. M.TITLE: Phase diagram of the praseodymium-neodymium systemSOURCE: Zhurnal neorganicheskoy khimii, v. 8, no. 8, 1963, 1998-2000TOPIC TERMS: praseodymium-neodymium phase diagram, praseodymium-neodymium systems, α -praseodymium, β -praseodymium, α -neodymium, β -neodymium, praseodymium-neodymium solubility, praseodymium-neodymium solid solution

ABSTRACT: The phase diagram of the praseodymium-neodymium system, based on the study of Pr-Nd alloys, is given in Fig. 1 of Enclosure. The alloys were melted from 97% pure and 99% pure Nd in an arc furnace in a helium atmosphere. The impurities were other rare-earth metals and Cu, Fe, and Ca. The cast alloys were annealed at 600°C for 20 hr. Thermal analysis, microscopic examination, x-ray diffraction patterns, and hardness tests showed that both modifications of Pr and Nd—the hexagonal low-temperature α -modification and the cubic high-temperature β -modification—form continuous series of solid solutions.

Card 1/6

MARKOVA, I. A.,

"Phase diagrams of Y rare-earth metal alloys"

report presented at the Conf. on New Trends in the Study and Applications of Rare Earth Metals, Moscow, 18-20 Mar 63

I-25039-65 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(b) IJP(c) JD/JG/MLK

ACCESSION NR: AT4048702

S/0000/64/000/000/0124/0128

21
Bx1

AUTHOR: Markova, I.A., Terekhova, V.F. (Candidate of technical sciences); Savitskiy, Ye. M. (Professor, Doctor of chemical sciences)

TITLE: Yttrium and the prospects for its use

SOURCE: Vsesovuzhnoye soveshchaniye po splavam redkikh metallov, 1963. Voprosy teorii i primeneniya redkozemel'nykh metallov (Problems in the theory and use of rare-earth metals); materialy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 124-128

TOPIC TAGS: yttrium physicochemical property, distilled yttrium, yttrium alloy, yttrium alloy phase diagram, rare earth alloy

ABSTRACT: This is a review of studies published and conducted in the SSSR and abroad on the properties of yttrium and its present and possible future applications. At the Laboratoriya redkikh metallov, splavov (Laboratory of Rare Metals and Alloys), studies are being conducted on the physicochemical properties of pure yttrium and its interaction with the basic industrial metals. Distilled yttrium of 99.6% purity and monocrystalline Y can now be investigated. Phase diagrams of yttrium with the basic industrial metals (over 20) have been published in the last 5 years. Those investigated at the authors' laboratory are listed

Card 1/2

L25039-65

ACCESSION NR.: AT4048702

and described; phase diagrams with non-mixability were determined for Y with metals of the IA, IIA and VA subgroups of the periodic system, as well as with Cr and U; eutectic phase diagrams are shown for Ti, Zr, Hf, Mo and W. A continuous series and a wide range of solid solutions are obtained only with the rare earth metals, scandium and thorium. In all other cases, the range of solid solutions is rather narrow, to 1.0% by weight. Phase diagrams of Y with La and Ce reveal the formation of chemical compounds in the solid YLa and YCe phase. On the basis of the physical properties of the pure metal and its phase diagrams, basic guidelines for the use of yttrium in industry may be projected. Its applications are listed, and its effect on high-melting metals, particularly V, Nb and Cr, is stressed. The addition of 1.0 wt. % Y to chromium, for example, will sharply decrease nitrogen diffusion in the latter, thus increasing thermal stability. The use of Y and its compounds in nuclear technology is also mentioned (U.S. source). Studies for new applications as superconductors or semiconductors are far from completed. Orig. art. has: 6 figures and 1 table.

ASSOCIATION: none

ENCL: 00

SUB CODE: IC, MM

SUBMITTED: 13Jun84

OTHER: 001

NO REF SOV: 003

Card 2/2

L 11307-65 EMT(m)/EPF(c)/EMP(t)/EMP(b) Pr-4 JD/JG

ACCESSION NR: AP4043586

S/0078/64/009/008/2034/2036

AUTHOR: Markova, I. A.; Terekhova, V. F.; Savitskiy, Ye. M.

TITLE: Yttrium-erbium and yttrium-scandium alloys (4)

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 8, 1964, 2034-2036

TOPIC TAGS: yttrium-erbium alloy, yttrium-scandium alloy, yttrium-erbium phase diagram, yttrium-erbium system, yttrium-scandium system, yttrium-erbium alloy property, yttrium-scandium alloy property

ABSTRACT: The yttrium-erbium and yttrium-scandium systems were investigated. Alloys were melted from 99.6% pure yttrium and 90% pure erbium (the scandium purity was not specified) in an arc furnace in helium atmosphere. The yttrium-erbium system forms a continuous series of solid solutions. The curves of composition dependence of hardness and resistivity are typical for a system with a continuous series of solid solutions. Both curves show a maximum at approximately 70% erbium. All the alloys have a hexagonal, close-packed lattice of the magnesium type. The yttrium-scandium system was studied by similar methods. In this system the components form a

Card 1/2

L-11307-65

ACCESSION NR: AP4043586

continuous series of solid solutions between isomorphic modifications. The results concerning the yttrium-scandium system were confirmed by other researchers. Orig. art. has: 3 figures.

ASSOCIATION: none

SUBMITTED: 01Feb66

ATD PRESS: 3103

ENCL: 00

SUB CODE: MM

NO REF Sov: 003

OTHER: 006

Card 2/2

SAVITSKIY, Ye.M.; TEREKHOVA, V.F.; BUROV, I.V.; NAUMKIN, O.P.; MARKOVA, I.A.

Alloys and compounds of rare-earth metals. Izv. AN SSSR. Neorg. mat.
1 no.10:1648-1659 O '65.

(MIRA 18:12)

1. Institut metallurgii imeni A.A.Baykova, Moskva. Submitted
July 5, 1965.

L 33953-65 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(b) IJP(c) JD/JG
ACCESSION NR: AP5006925 5/0181/65/007/003/0950/0952

AUTHOR: Vedernikov, M. V.; Markova, I. A.; Meshkova, G. N.

TITLE: Electrical resistivity and thermal emf of La-Ce, La-Pr, and
Pr-Nd alloys 21 27 2724

SOURCE: Fizika tverdogo tela, v. 7, no. 3, 1965, 950-952 23

TOPIC TAGS: Lanthanum cerium alloy, lanthanum praseodymium alloy, β
praseodymium neodymium alloy, continuous series solid solution, solid
solution, rare earth metal, electrical resistivity, electrical con-
ductivity, composition

ABSTRACT: No changes occurred in the electrical conductivity of La-Pr
and Pr-Nd rare-earth metal alloys when the composition of the materials
was varied from 0 to 100%. This linear dependence was unexpected, be-
cause, even though each alloy has two similar components, the atomic
and crystallographic differences of these components are sufficiently
marked to produce an increase of resistivity of 2-3 percent. Such
an increase was actually observed in La-Ce, the third rare-earth metal
alloy investigated. The linearity of the dependence between conducti-

Card 1/2

I 33953-65

ACCESSION NR: AP5006925

vity and composition moreover seemed to disagree with similar measurements performed on other continuous-series solid solutions whose resistivities as functions of composition have a convex curve with a maximum occurring at a component ratio near 50:50%. It is suggested that lattice damage in the mixing of components is responsible for the increased resistivity. It is therefore assumed that in the case of La-Pr and Pr-Nd some compensating mechanism comes into play which is perhaps connected with the magnetic moment of ions and consequently enhances conductivity. A study of the thermal emf versus composition of the three alloys showed that with small admixtures of the second component irregularities appear. It is conceded, however, that these might have been caused by insufficient purity of the samples. Orig. art. has: 2 figures.

[ZL]

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Semiconductor Institute, AN SSSR)

SUBMITTED: 05Nov64

ENCLOSURE: 00

SUB CODE: SSEM

NO REF SOV: 002

OTHER: .005

ATD PRESS 3209

Card 2/2

L 39712-65 SPP(c)/EWT(m)/EWP(b)/T/EWA(d)/EWP(w)/EWP(t) Pr-l IJP(c) JD/JH/JG

ACCESSION NR: AP5005336

S/0126/65/019/002/0290/0293

AUTHOR: Chechernikov, V. I.; Iuliu Pop; Markova, I. A.

38

35

B

TITLE: Magnetic properties of Er-Y alloys

SOURCE: Fizika metallov i metallovedeniye, v. 19, no. 2, 1965, 290-293

TOPIC TAGS: rare earth compound, yttrium compound, erbium compound, magnetic property, antiferromagnetism

ABSTRACT: Alloys were fused from 99.6% pure distilled yttrium and erbium containing the following impurities: Ca \leq 0.04, Cu \leq 0.035, Fe \leq 0.06, Tu \leq 0.2 and Ho \leq 0.2 wt %. The alloys were prepared in an arc furnace in a helium atmosphere. Before measurement they were annealed for 60 hours at 800° C. The results of microstructural, x-ray, and thermal analyses as well as the measurements of the hardness and electrical resistance indicate that erbium and α -yttrium form continuous series of solid solutions. Eight alloys of the Er-Y system were studied containing: 70.21, 64.67, 58.84, 38.14, 31.6, 9.81, 3.96 and 2 at. % yttrium and the remainder erbium. The results of the study indicate that alloys with a high Er content display paramagnetism of the Curie-Weiss type, associated with localized f-

Card 1/5

L-39712-65

ACCESSION NR: AP5006336

3

electrons. The collective s-d electron system becomes more important as the Y content increases. In alloys with a high Y content the paramagnetic Curie point falls below zero which indicates possible antiferromagnetism. This assumption agrees with the results of other workers who in diluted alloys of Y with the rare earth metals (Nd, Cd, Tb, Er, Ho, Dy) established the presence of antiferromagnetism. "In conclusion we thank Professor Ye. I. Kondorskiy for useful comments." Orig. art. has: 3 figures.

ASSOCIATION: Moskovskiy gosuniversitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 29Jul64

ENCL: 03

SUB CODE: MM

NO REF SOV: 002

OTHER: 004

Card 2/5

L-39712-65

ACCESSION NR: AF5006336

ENCLOSURE: 01

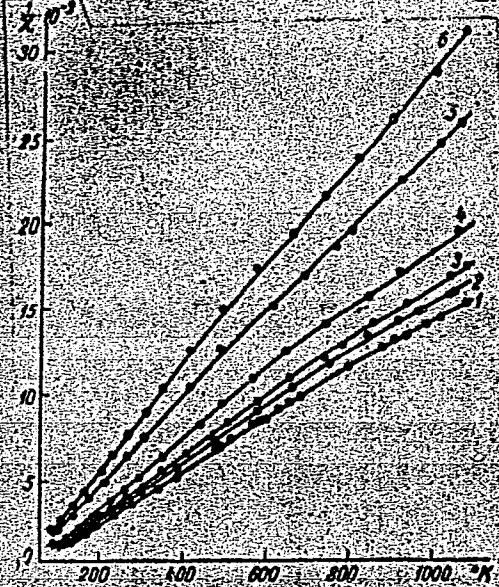


Fig. 1. Inverse susceptiblity as a function of temperature for erbium (1) and alloys: 2--2; 3--3.96; 4--9.81; 5--31.6, 6--38.14 at. % Y.

Card 3/5

L-9712-65

ACCESSION NR: AP5006336

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ENCLOSURE: 02

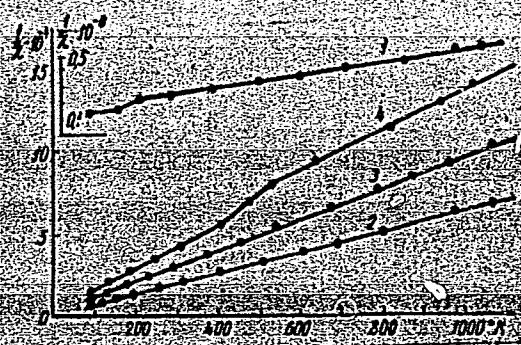


Fig. 2. Inverse susceptibility as a function of temperature for yttrium (Y) and alloys: 2--58.84; 3--64.67; 4--70.21 at. % Y.

Card 4/5

L 39712-65

ACCESSION NR: AP5006336

ENCLOSURE: 03

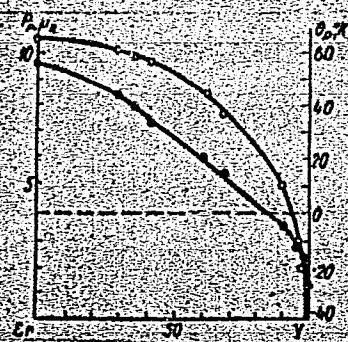


Fig. 3. Effective magnetic moment (•) and paramagnetic Curie point (○) as functions of the alloy composition.

Card 5/5

ACC NR: AP7000806

SOURCE CODE: UR/0089/66/021/005/0420/0421

AUTHOR: Markova, I. A.

ORG: none

TITLE: All-Union conference on the phase diagrams of metallic systems

SOURCE: Atomnaya energiya, v. 21, no. 5, 1966, 420-421

TOPIC TAGS: metal alloy, binary alloy, ternary alloy, quaternary alloy, alloy phase diagram, phase diagram conference

ABSTRACT: A conference on the phase diagrams of metallic systems as a theoretical basis for development of alloys for modern engineering was held 7-9 June 1966 at the Institute of Metallurgy im. A. A. Baykov. The conference was attended by more than 250 representatives of 60 scientific and industrial organizations from 16 cities of the Soviet Union. The main reports, compiled in a special issue, represented a critical review of the known phase diagrams of systems based on refractory metals of the IV A, VA, VI A groups, rhenium, rare-earth metals, platinum, and light metals. Academician I. V. Tananayev, in his opening statement, noted the timeliness of the conference since the phase diagrams of the metal systems are the basis of physico-chemical analysis. Yu. V. Yefimov reported on the phase diagrams of binary vanadium systems. Ye. M. Savitskiy and A. M. Zakharov spoke on the phase diagrams of niobium systems and new directions in the design of new niobium alloys. I. A. Tsyganova and M. A. Tylkina

Card 1/3

ACC NR: AP7000806

discussed the phase diagrams of tantalum. I. I. Kornilov, L. I. Pryakhina and R. S. Polyakova reviewed the data of Soviet and non-Soviet research on the physico-chemical reactions between chromium, molybdenum and tungsten, and pointed out the basic directions of further research in the development of new engineering alloys with special properties, such as high heat resistance, thermionic emissivity, superconductivity, and high corrosion resistance. Such alloys are of primary importance for aircraft, rocket, electronic and nuclear engineering. On the basis of research done by Ye. M. Savitskiy and I. I. Kornilov, V. N. Svechnikov, Yu. A. Kocherginskiy, A. K. Shurin, and V. M. Pan, phase diagrams for niobium and almost all elements whose addition can promote the development of heat-resistant niobium alloys were plotted. Ye. M. Drits spoke on the phase diagrams of magnesium-base and aluminum-base alloys. A. E. Goldenberg reported on the phase diagram of the aluminum-beryllium-magnesium system. N. D. Nagorskaya discussed the phase diagrams of binary systems with beryllium. I. I. Kornilov and P. B. Budberg spoke on the phase diagrams of the titanium, zirconium, and hafnium systems. I. I. Kornilov and others described the interaction of titanium and zirconium with oxygen. V. Ya. Markiv and others discussed phase diagrams and crystal structures of compounds in the titanium-iron (cobalt, nickel) systems. K. B. Povarova reviewed the phase diagrams of rhenium. O. K. Khamidov and Ye. M. Savitskiy reported on the binary systems of rhenium with rare-earth elements. Yu. B. Kuz'ma described ternary systems of rhenium with the heat-resistant transition metals and carbon. L. I. Dashevskaya spoke on the interaction of rhenium with thorium, lanthanum, and praseodymium. V. P. Polyakova described the phase diagrams of platinum-group metals and the prospects of utilizing alloys on a base of these

Card 2/3

ACC NR: AP7000806

metals. V. F. Terekhova and Ye. M. Savitskiy reviewed the phase diagrams of rare-earth metals plotted in 1962-1965. V. S. Shteyn reported on the use of computers for plotting phase diagrams. [MS]

SUB CODE: 11/ SUBM DATE: none/ ATD PRESS: 5110

Card 3/3

ACC NR: AP7002734 (A)

SOURCE CODE: UR/0126/66/022/006/0839/0842

AUTHOR: Shafigullina, G. A.; Chechernikov, V. I.; Markova, I. A.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosuniversitet)

TITLE: Magnetic properties of Dy-Y alloys

SOURCE: Fizika metallov i metallovedeniye, v. 22, no. 6, 1966, 839-842

TOPIC TAGS: dysprosium compound, yttrium compound, magnetic property, magnetic susceptibility, Curie point, magnetic moment

ABSTRACT: The article presents the results of an experimental investigation of magnetic properties of Dy-Y alloys throughout the range of concentrations in the temperature interval of from 100 to 1000°K in the presence of magnetic fields of various intensity. To this end, 9 alloys of this system, containing 5.7, 11.9, 18.7, 26.6, 35, 44.8, 55.8, 68 and 83 at.% Dy (with Y as the remainder) were obtained by multiple remelting in a helium-atmosphere arc furnace and vacuum annealing at 10^{-6} mm Hg for 70 hr at 850°C. Magnetic susceptibility was measured by the conventional ponderomotive method on using a magnetic balance. Heating to high temperatures was accomplished with the aid of a platinum resistance furnace, and the temperature

Cord 1/6

UDC: 669.85/86: 538.214

ACC NR: AP7002734

was measured by means of precalibrated Pt-PtRh and Cu-constantan thermocouples. The quartz cup containing the specimen and the thermocouple junction were in a uniform temperature field. The magnetic balance was calibrated in advance with respect to pure holmium (for < 700°K) and nickel (for 700-1100°K). Findings: magnetic susceptibility χ and crystal lattice constants a and c change monotonically over the entire concentration range (Fig. 1). The pattern of temperature dependence of reverse susceptibility $1/\chi$ is linear, (Figs. 2, 3) thus making

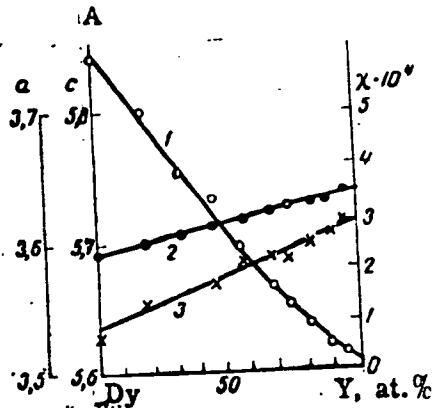


Fig. 1. Magnetic susceptibility χ (curve 1) and lattice constants a (curve 2) and c (curve 3) as functions of composition of the Dy-Y alloy at room temperature

Card 2/6

ACC NR: AP7002734

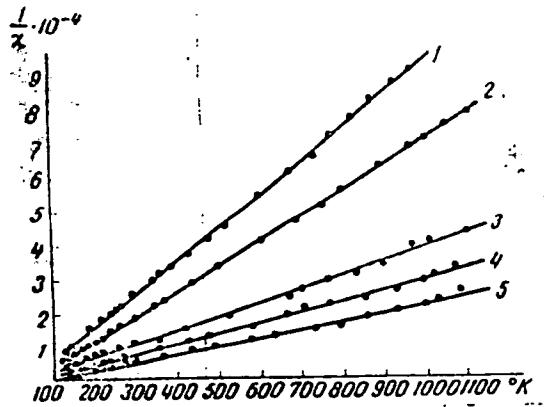


Fig. 2. Temperature dependence of reverse susceptibility of Dy-Y alloys:
1 - 5.7 at. % Dy; 2 - 11.9 at. % Dy; 3 - 18.7 at. % Dy; 4 - 26.6 at. % Dy; 5 - 35 at. % Dy.
(Remainder: Y)

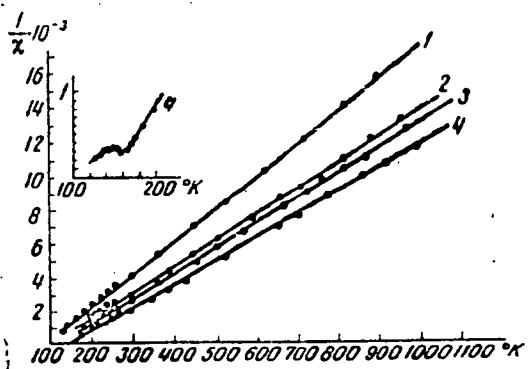


Fig. 3. Temperature dependence of reverse susceptibility of Dy-Y alloys:
1 - 44.8 at. % Dy; 2 - 68 at. % Dy; 3 - 83 at. % Dy (Remainder: Y)

Card 3/6

ACC NR: AP7002734

it possible to calculate the effective atomic magnetic moment p_p of the alloys as well as to determine the paramagnetic Curie point θ_p (Fig. 4). Within the investigated temperature range

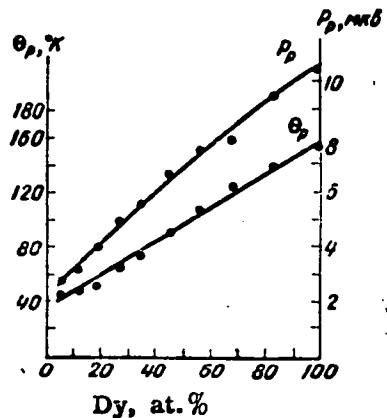


Fig. 4. Effective atomic magnetic moment p_p and paramagnetic Curie point θ_p as functions of alloy composition

the magnetic susceptibility of Dy-Y alloys follows the Curie-Weiss law. p_p and θ_p of the alloys

Card 4/6

ACC NR: AP7002734

vary monotonically as a function of the alloy composition, and the magnetic moment calculated per atom of dysprosium corresponds to the trivalent ion of this element in fundamental state. In the low temperature range there occurs a transition from antiferromagnetic to paramagnetic state, which shifts in the direction of low temperatures with increase in the magnetic field intensity (Fig. 5). All this indicates that the magnetic properties of Dy-Y alloys are chiefly

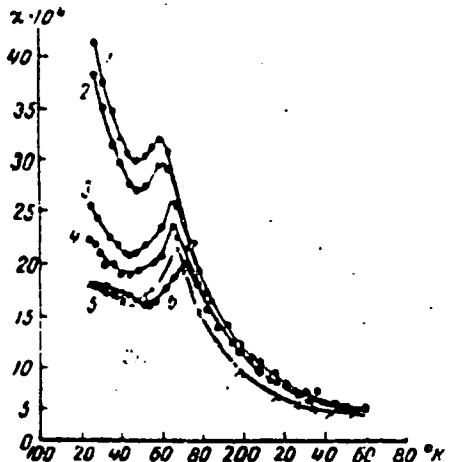


Fig. 5. Temperature dependence of susceptibility of alloy no. 9 (83 at. % Dy, remainder Y) as a function of magnetic field intensity H:
1 - 17,400 oe; 2 - 16,100 oe; 3 - 14,600 oe;
4 - 12,440 oe; 5 - 10,050 oe; 6 - 7550 oe

Card 5/6

ACC NR: AP7002734

conditioned by localized 4f-electrons, while in the antiferromagnetism region there apparently exists a spiral-like magnetic structure resembling the structure observed for pure dysprosium. "In conclusion the authors wish to express their gratitude to Professor Ye. I. Kondorskiy for his valuable comments." Orig. art. has: 5 figures.

SUB CODE: 11, 20/ SUBM DATE: 29Mar66/ OTH REF: 004

Card 6/6

MARKOVA, I.A.; NEPYSHNEVSKAYA, V.V.; STUKALOV, L.A.

Materials of examinations for toxoplasmosis in children with
oligophrenia. Trudy Ver. med. inst. filialov "R".

(MIRA 18:10)

1. Kafedra infektsionnykh bolezней Voronezhskogo meditsinskogo
instituta (for Markova, Nepyshnevskaya). 2. Kafedra psichiatrii
Voronezhskogo meditsinskogo instituta (for Stukalova).

LEBEDEVA, Z.I.; MARKOVA, I.G.

Conductometric determination of π -nitro- α -acetylaminooacetophenone.
Med.prom. 13 no.1:44-46 Ja '59. (MIRA 12:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.
(ACETOPHENONE) (CONDUCTOMETRIC ANALYSIS)

LEBEDEVA, Z.I.; MARKOVA, I.G.

Quantitative determination of platiphyllin and seneciphyllin
in roots and blades of Senecio platiphyllus. Med. prom. 15
no.11:56-~~48~~ N '61. (MIRA 15:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevti-
cheskiy institut imeni S. Ordzhonikidze.
(ALKALOIDS)

MARKOVA, I.K.[translator]; ANUCHKIN, M.P., kand. tekhn. nauk, red.;
KAVKOVA, V., red.

[Pipes for the construction of main oil and gas pipelines
in the United States] Truby dlja stroitel'stva magistral'-
nykh gazo- i nefteprovodov v SShA. Moskva, 1963. 93 p.
(MIRA 17:9)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy proizvodstvennyy
komitet po gazovoy promyshlennosti. 2. Vsesoyuznyy nauchno-
issledovatel'skiy institut tverdykh splavov (for Markova).

L 3766-65 EMT(m)/EPF(c)/EMT(j) Ps-4/Pr-1 RM
ACCESSION NR: AT4008699

57
8/29/82/63/000/044/0048/0047

AUTHOR: Guseva, V. I., Lukashevich, I. P., Susanina, O. G., Markova, L. M.,
Troitskaya, N. I.

TITLE: Petroleum refining products as softeners-filters for butadiene-styrene rubbers

SOURCE: Moscow. Institut neftekhimicheskoy i gazovoy promyshlennosti. Trudy*. no.
44. 1963. Neftekhimika, pererabotka nefti i gaza. 48-57

TOPIC TAGS: petroleum product, plasticizer, filler, butadiene styrene rubber,
butadiene styrene rubber filler, butadiene styrene rubber plasticizer, oil refining, oil
refining product, low temperature resistant rubber, oil filled rubber, rubber
softener, softener, rubber plasticizer

ABSTRACT: The use of a wide variety of petroleum products as softeners and fillers
for rubbers was investigated. The physical-chemical properties of the petroleum
fractions and the compounds separated from them were analyzed. It was found that
aromatic hydrocarbons combine with rubber better than the paraffin-naphthenic type.
A change from light to heavy aromatic hydrocarbons causes an increase in the internal
friction coefficient and the tensile and rupture strength of the rubber, along with a

Card 1/3

L 8766-65
ACCESSION NR. A14008699

decrease in elasticity and frost resistance. Light aromatic hydrocarbons with a ring number of 1, 7-2.0 and an aniline point no higher than 70C, as well as medium hydrocarbons with a ring number of 2.5-3.0 and an aniline point no higher than 60C, combine well with and guarantee high vulcanized rubbers. Paraffin-naphthenic hydrocarbons with a ring number of 2.5-3.5 and an aniline point no higher than 125C also give suitable results. Rubbers containing avtol 18 were compared with those containing other petroleum products. It was noted that rubbers with refined and deparaffined oils having a lower aromatic hydrocarbon content possess a lower brittleness temperature, higher elasticity and significantly lower stability than rubbers with avtol 18. However, they are deficient in the sense that they exude oil. The physical-mechanical properties of rubbers containing deasphalted tar oil are comparable to those containing avtol 18. Adding raffinate P to rubbers causes a high stability with large doses and high elasticity at increased temperatures. The use of softeners and fillers is necessary in order to obtain sufficiently high physical-mechanical properties and a high elasticity for rubbers. An example of a softener-filler is a secondary raffinate obtained by selective refining and removal of paraffin-naphthenate and naphthene-aromatic hydrocarbons. Several methods are proposed for obtaining products of this type; separation by cooling an

Cord 2/3

L-8766-65

ACCESSION NR: AT4008699

extracted phenol solution gives the best results. Orig. art. has: 5 tables.

ASSOCIATION: Institut neftekhimicheskoy i gazovoy promyshlennosti, Moscow. (Institute of the Petroleum Chemistry and Gas Industry)

SUBMITTED: 00

ENCL: 00

SUB CODE: MT, OC

NO REF Sov: 000

OTHER: 003

Card 3/3

12(2)

SOV/113-50-1-6 12

AUTHORS: Ayzenberg, A.S., Markova, I.V., Candidate of Technical Sciences, Sung Ch'eng-yi

TITLE: The Determination of the Optimum Fanning of Air-Cooled Engine Cylinders

PERIODICAL: Avtomobil'naya promyshlennost', 1959, Nr 4, pp 11-14 (USSR)

ABSTRACT: The authors state that the amount of power required for driving the fan of a forced air-cooling system is an important factor and that the fins must have such a geometrical configuration that they provide an optimum cooling effect. The authors present formulas and graphs for calculating the fanning of air-cooled engines. There are 1 diagram, 2 graphs and 6 Soviet references, 2 of which are Soviet.

-- ASSOCIATION: NAMI

Card 1/1

MARKOVA, I.V., kand. tekhn. nauk; POLUKHIN, Ye.S.

Specific results of experimental works on engines for the "Zaporozhets" automobile. Avt.prom. no.9:8-12 S '61. (MIRA 14:9)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut.
(Automobiles--Engines)

L-20777-65 EWT(d)/EWT(m)/EPF(c)/EWP(f)/T
ASD(r)-3/AFFTR/AFTG(p)/ESD(t) WE
ACCESSION NR: AP5001161

Pr-4 AFWL/FSD/SSD/AEDC(b)/

S/0113/64/000/009/0005/0007

AUTHORS: Markova, I. V. (Candidate of technical sciences); Polukhin, Ye. S.

On the knocking characteristics of air cooled engines ²⁰ ³³ B

SOURCE: "Avtomobil'naya promyshlennost'" no. 9, 1961, 5-7

TOPIC TAGS: air-cooled engine, knocking, combustion chamber, compression ratio, carburetor, piezoelectric transducer, isooctane, octane/Mezh-966 automobile, M motor fuel

ABSTRACT: The effect of the temperature level on the tendency toward knocking was studied in air-cooled engines using three different types of combustion chambers. The experiment was performed on the engine of an MeMZ-966 "Zaporozhets" automobile, with a compression ratio of 7.0. The power was regulated by adjusting the carburetor and the r.p.m., corresponding to the regime of maximum torque. Portholes were provided on the combustion chambers of all the cylinders for mounting piezoelectric transducers, and facilities for visual observation of the indicator diagrams were provided. The fuel used was a mixture of commercial isooctane and fuel-M. It was noted that the temperature level of the combustion

Card 1/2

L 20777-6
ASSOCIATION: NAVF AP5001161

chamber walls (varied from 135 - 260C) had a significant effect on the tendency to knock. On varying the temperature by 10C, the octane number specified for this fuel increased by about one point on the octane scale. The turbulence of the charge due to the combustion chamber installations was accompanied by a reduction in the tendency to knock. A change in the compression ratio from 6.5 to 8.0 resulted in an increase of the octane rating by 10 points. Orig. art. has: 1 formula, 3 tables, and 4 figures.

ASSOCIATION: NAVF

SUBMITTED: 00

SUB CODE: PR

NO REF Sov: 001

ENCL: 00

OTHER: 000

Card 2/2

SINYAKOVA, S.I.; MARKOVA, I.V.

Determination of the ultrasmall Pb, Cu, and Zn content of alkalis
and acids with the aid of amalgam polarography on a stationary
mercury drop. Zav.lab. 27 no.5:521-525 '61. (MIRA 14:5)

1. Institut geokhimii i analiticheskoy khimii imeni V. I. Vernadskogo
Akademii nauk SSSR.

(Lead--Analysis)
(Copper--Analysis)
(Zn--Analysis)

5/07/63/018/003/003/006
E071/E436

AUTHORS: Sinyakova, S.I., Dudareva, A.G., Markova, I.V.
Gulyayeva, I.N.

TITLE: Determination of copper, lead, cadmium and zinc
impurities in particular pure indium and its salts
by the method of amalgam polarography with a stationary
electrode

PERIODICAL: Zhurnal analiticheskoy khimii, v.18, no.3, 1963, 377-384

TEXT: A method of amalgam polarography with a stationary
electrode (mercury drop) was developed for the determination of
zinc, cadmium, lead and copper impurities at concentrations down
to 10^{-6} % in metallic indium and its salts. The method is based on
the extraction of indium (as bromide) with di-isopropyl ether from
5 M HBr. After concentrating the impurities in the mercury drop by
electrolysis at a controlled potential from potassium (sodium)
hydroxide and HCl solutions, they are determined from the curves of
anodic dissolution of the metals from the amalgam at a continuously
changing potential. Since indium is not completely removed by the
extraction, the effect of additions of complexone III, sodium

Card 1/2

Determination of copper ...

S/075/63/018/003/003/006
E071/E436

acetate and sodium tartrate on the shift of the indium wave to more negative potentials was investigated by the method of oscillographic polarography. The method was tested on a number of samples of metallic indium and indium iodide with satisfactory results. The maximum error does not exceed $\pm 15\%$. There are 6 figures and 4 tables.

ASSOCIATIONS: Institut geokhimi i analiticheskoy khimii im. V.I.Vernadskogo AN SSSR (Institute of Geochemistry and Analytical Chemistry imeni V.I.Vernadskiy AS USSR) Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V.Lomonosova (Moscow Institute of Fine Chemical Technology imeni M.V.Lomonosov)

SUBMITTED: June 26, 1962

Card 2/2

SINYAKOV, O.I.; MARKOVA, L.V.

Determination of zinc, iron, and copper impurities in
hydroxides. Method and kinetic reagent prepar. no. 1

Determination of zinc, iron, and copper impurities in
acids. Iod.: 54-57

1. Institut gachetnogo i gavitivnogo zavoda imeni V... n. Tcherny
A. Slob.

L 28713-65 ZWT(m)/ZWI(m)/T/EWP(t)/EWP(b) IJP(c) JD/EWH

ACCESSION NR: AT5004072

S/3127/63/000/05-/0058/0062

AUTHOR: Sivakova, S. I., Dudareva, A. G., Markova, I. V., Talalayeva, I. N.

TITLE: Determination of zinc, cadmium, lead, and copper impurities in indium and its salts

SOURCE: USSR- Gosudarstvennyy komitet po khimii. Metody analiza khimicheskikh reaktivov i preparatov, no. 5/6, 1963. Polyarograficheskoye opredeleniye ul'tramikroimpurestey s nakopleniem ih na statcionarnykh rtutnykh ili tverdykh elektrodakh s posleduyushchim rastvoreniem (Polarographic determination of ultramicro-impurities with their accumulation on stationary mercury or solid electrodes and subsequent dissolution), 58-62

TOPIC TAGS: indium analysis, indium refining, zinc determination, cadmium determination, lead determination, copper determination, amalgam polarography, mercury cathode

ABSTRACT: The method is based on the separation of indium by extraction with diisopropyl ether from a solution of hydrobromic acid followed by a determination of the impurities by the amalgam polarographic technique with their electrolytic accumulation on a stationary mercury cathode. The apparatus, reagents, and solutions employed are listed, and the determination procedure is described. The content of the impurities present in indium as determined by the method of additions is calculated by means of the formula

Card 1/2

L 28713-65

ACCESSION NR: AT5004072

$$\% = \frac{C \cdot h_1 \cdot v_1 \times 100 \times 10^{-6}}{(h_2 - h_1) \cdot v_2 \cdot g}$$

where h_1 is the depth of the anode peak of the investigated solution, in mm; h_2 is the depth of the anode peak after the introduction of a standard solution of the impurity, in mm; C is the concentration of the impurity due to the addition, in $\mu\text{g}/\text{ml}$; v_1 is the volume of the solution being analyzed, in ml; v_2 is the volume of the solution after the introduction of the addition, in ml; and g is the weight of the sample in grams. The accuracy of the method varies between +3% and +15% depending upon the content of impurities. Orig. art. has: 3 figures, 1 table, and 1 formula.

ASSOCIATION: GEOKII

SUBMITTED: 00Dec62

ENCL: 00

SUB CODE: IC, MM

NO REF SOV: 003

OTHER: 001

Card 2/2

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001032510012-6

MARKOVA, I.V.; USTINOV, V.P.

Moscow seminar on educational opportunity - USSR, Moscow, 1964.
19 Nov. 3:405 1964.

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001032510012-6"

L 52288-65 EWT(m)/EWG(m)/T/EWP(t)/EWP(b) IJP(c) RWH/JD

ACCESSION NR: AT5012677

UR/2513/65/015/000/0164/0174 19

AUTHOR: Sinyakova, S.I., Markova, I.V., Galfayan, N.G. 18

TITLE: Electrolytic concentration of trace amounts of lead and copper at a stationary mercury electrode and their determination from catalytic currents 11 71 8+)

SOURCE: AN SSSR. Komissiya po analiticheskoy khimii. Trudy, v. 15, 1965. Metody kontsentrirovaniya veshchestv v analiticheskoy khimii (Methods of concentrating substances in analytical chemistry), 164-174

TOPIC-TAGS: electrolytic concentration, lead determination, copper determination, mercury electrode, catalytic current

ABSTRACT: A study was made of the electrochemical accumulation of lead and copper impurities in a stationary mercury electrode and their subsequent determination by means of the catalytic currents arising from the dissolution of the amalgam at a steadily changing potential in neutral KCl solutions containing oxygen or H₂O₂. The influence of lead and copper ions, duration of preelectrolysis, concentration of oxygen and of the catalyst ion, temperature, and other factors on the magnitude of the catalytic current of H₂O₂ was studied. It was shown that the maximum potential of lead

Card 1/2

L 52288-65

ACCESSION NR: AT5012677

(E_{max} Pb) is equal to -0.41 V and that E_{max} Cu = -0.18 V relative to the saturated calomel electrode, and that the magnitude of the catalytic currents depends linearly on the lead and copper concentration of the solution, with a 25% maximum deviation at copper concentrations equal to 5×10^{-9} M and lead concentrations of 5×10^{-10} to 1×10^{-9} M. The magnitude of the catalytic current of H_2O_2 was found to depend on the ratio of the concentration of the metal ions to the concentration of hydrogen in the solution. A possible mechanism for the formation of this current is proposed. Orig. art. has: 6 figures, 4 formulas and 3 tables.

ASSOCIATION: Komissiya po analiticheskoy khimii, AN SSSR (Commission on Analytical Chemistry, AN SSSR)

SUBMITTED: 00 ENCL: 00 SUB CODE: IC, GC

NO REF SOV: 007 OTHER: 005

Ref
card - 2/2

SINYAKOVA, S.I.; MARKOVA, I.V.; GOLFAYAN, N.G.

Electrolytic concentration of ultrasmall quantities of lead and copper
on a stationary mercury electrode and their determination from catalytic
currents. Trudy Kom. anal. khim. 15:164-174 '65. (MIRA 18:7)

L 37142-66 EWT(1)/T JK

ACC NR: AP6004971

(N)

SOURCE CODE: DR/0320/65/020/005/3571/3574

AUTHORS: Belokrylov, G. A. (Member of pharmacology dept, Member of microbiology dept); Markova, I. V. (Member of pharmacology dept, Member of microbiology dept); Ostrovskiy, A. D. (Member of pharmacology dept, Member of microbiology dept)

ORG: Department of Pharmacology /headed by Acting member AMN SSSR, Professor V. N. Karasik (deceased)/ and Department of Microbiology /headed by Professor V. P. Berzin/, Leningrad Institute of Pediatric Medicine (Kafedra farmakologii i kafedra mikrobiologii Leningradskogo pediatricheskogo medicsinskogo instituta)

TITLE: Effect of adrenal hormones on the animal resistance to staphylococcal and colibacillus endotoxin

SOURCE: Farmakologiya i toksikologiya, v. 26, no. 5, 1965, p71-774

TOPIC TAGS: medical research, adrenal gland, cortisone, ACTH

ABSTRACT: Tests were performed to study the effect of adrenalectomy and injection of individual adrenal hormones on organism's resistance to staphylococcal and colibacillus exotoxins. Adrenalectomies were performed on 256 adult rats, and 200 of them were divided into 6 groups, each receiving a daily injection of varying doses of adrenal hormones cortisone or hydrocortisone, DOCA, or adrenalin separately or a mixture of DOCA and adrenalin. Sham operations were performed to evaluate the

Card 1/2

UDC: 616.981.25+616.981.467-077.1:578.741

L 37142-66

ACC NR: AP6004971

trauma or resistance, and 30 medullectomies were performed. Thirty intact animals were injected with 10 mg/kg hydrocortisone and 49 with 10 units per kg ACTH. The staphylococcal exotoxin used was prepared from a strain of white staphylococcus and the colibacillus endotoxin was obtained according to the method of Raven and Messrobenau from the strain OlllB₄H₂. Tabulated results show that the LD₅₀ in terms of animals from colibacillus endotoxin is 500 times lower than that of intact animals. Injection of adrenal hormones does not change the low resistance to endotoxin, but only combined injection of cortisone and adrenalin restores resistance to the former level. Tabulated results of tests with exotoxin show adrenalectomy does not affect resistance to exotoxin, and cortisone or DOCA increases resistance above the level of control animals. Medullectomy reduces resistance to endotoxin by 5 times. Injection of ACTH or hydrocortisone into intact animals does not influence their resistance to exotoxin, but markedly increases resistance to colibacillus endotoxin. Orig. art. has: 2 tables.

SUB CODE: 06/ SUBM DATE: 07Jul64/ ORIG REF: 001/ CTH REF: 004

Card 2/2 a

MARKOVA I. V.

117

Hyperkinesia of mesencephalic organs, which arises in frogs under barbiturate narcosis. I. Y. Markova (Leningrad Pediat. Inst.). *Fiziol. Zhur. (J. Physiol.)* 36, 161-5 (1950).—In the initial stage of barbiturate narcosis frogs exhibit enhanced mobility of 2 types: free motion (crawling, jumping) and a hyperkinesis which arises after the primary stages and which depends on intact condition of mesencephalon; this is exhibited in the form of inability of the animal to return from dorsal position, relaxation of skeletal musculature and lengthening of the latent period of reflex motions. As a result, the frog may be used as a test object for study of drugs which affect either the frontal sections of the brain or primarily the mid-brain locations.
G. M. Kosolapoff

...and the following additional information is extracted from this document:
The following notes of the author's (Krasilnikov) in regard to animals
specimens can be considered as confidential information by its
writer; there is no reason to assume that this phenomenon is
connected merely with the distribution of the subcritical centre
as a result of the cortical narcosis. (Russian). E. L. PARKS

Chair Pharmaceutical, Hemingway Pediatrics Medical Staff

MARKOVA, I.V.

KARASIK, V.M.; MARKOVA, I.V.

Effect of morphine and of its esters on hyperkinesia induced by barbiturates. Biul.eksp.biol. i med. 42 no.11:33 N '56. (MLRA 10:1)

1. Iz kafedry farmakologii (zav. - chlen-korrespondent AMN SSSR V.M.Karasik) Leningradskogo pediatriceskogo meditsinskogo instituta.

(MORPHINE, effects,

on exper. hyperkinesia induced with barbiturates (Rus))

(BARBITURATES, effects,

exper. hyperkinesia, eff. of morphine & its esters (Rus))

(MOVEMENT DISORDERS, experimental,

hyperkinesia induced with barbiturates, eff. of morphine & its esters (Rus))

EXTRICATA MEDICA Sec 2 Vol 11/7 Physiology July 58

3323. RELATIONSHIP OF BARBITURATE HYPERKINESIS TO STAGE OF DEVELOPMENT AND FUNCTIONAL STATE OF THE CEREBRAL CORTEX (Russian text) -
Markova I.V. Dept. of Pharmacol., Ped. Med. Inst., Leningrad - FIZIOL. Z.

1957, 43/12 (1187-1190) Tables 1 Illus. 2

Barbiturates (hexobarbital and its Na derivative) produce hyperkinetic phenomena of subcortical origin in frogs, mice, rats and rabbits. These appear as fast contractions of separate muscle groups. The hyperkinesis is more marked in animals with underdeveloped forebrain (frogs). Decortication in rats, and ether (0.0007-0.014%) or paraldehyde (50 g. per kg.) decrease the dosage of barbiturates necessary for production of hyperkinesis. It is concluded that moderate depression of the CNS primarily of the cerebral cortex, facilitates hyperkinetic phenomena, probably brought about by the action of barbiturates upon subcortical structures.

Simonson - Minneapolis, Minn.

MARKOVA, I.V.

Effect of phenamine on motor irritation produced by barbiturates.
Biul.eksp.biol. i med. 46 no.10:71-72 O '58 (MIRA 11:11)

1. Iz kafedry farmakologii (zav. - chlen-korrespondent AMN SSSR prof. V.M. Karasik) Leningradskogo pediatricheskogo meditsinskogo instituta. Predstavlena deystvitel'nym chlenom AMN SSSR V.N. Chernigovskim.

(AMPHETAMINE, effects
on barbiturate-induced motor excitability in animals
(Rus))

(BARBITURATES, effects
motor excitability, eff. of amphetamine in animals
(Rus))

MARKOVA, I.V.

Study of age-specific reactivity to barbiturates. Fiziol.zhur.
(MIRA 13:4)
45 no.12:1484-1488 D '59.

1. From the Department of Pharmacology, Paediatric, Medical Institute, Leningrad.
(BARBITURATES pharmacology)
(AGING effects)

MARKOVA, I.V.

Role of the adrenopituitary system in the sensitivity of animals
of various ages to narcotics. Biul. eksp. biol. i med. 47 no.3:
57-60 Mr '59. (MIRA 12:?)

1. Iz kafedry farmakologii (zav. - chlen-korrespondent AMN SSSR prof.
V. M. Karasik) Leningradskogo pediatricheskogo meditsinskogo instituta.
Predstavlena deystvitel'nym chlenom AMN SSSR V. N. Chernigovskim.
(ACTH, effects,
on narcotic sensitivity in animals (Rus))
(NARCOTICS, effects,
sensitivity in animals, eff. of Acth (Rus))

MARKOVA, I.V. (Leningrad)

New data on the treatment therapy of acute barbiturate poisoning.
Klin.med. 38 no.9:27-34 S '60. (MIRA 13:11)

1. Iz kafedry farmakologii (zav. - chlen-korrespondent AMN SSSR prof. V.M. Karasik) Leningradskogo meditsinskogo pediatricheskogo instituta.

(BARBITURATES--TOXICOLOGY)

MARKOVA, I.V.

Dependence of age-related differences in sensitivity to barbiturates
on the development of the hypophysial-adrenal system. Biul. eksp.
biol. i med. 50 no.10:87-91 O '60. (MIRA 14:5)

1. Iz kafedry farmakologii (zav. - deystvitel'nyy chlen AMN SSSR
V.M.Karasik) Leningradskogo meditsinskogo pediatriceskogo instituta.
Predstavlena deystvitel'nym chленом AMN SSSR V.N.Chernigovskim.
(ADRENAL GLANDS) (BARBITURATES)

MARKOVA, I.V.

Influence of adrenal cortex hormones on the development of
rigor mortis of the skeletal musculature. Biul. eksp. biol.
i med. 51 no.6:45-46 Je '61. (MIRA 15:6)

1. Iz kafedry farmakologii (zav. - deystvitel'nyy chlen AMN
SSSR V.M. Karasik) Leningradskogo pediatricheskogo meditsinskogo
instituta. Predstavlena deystvitel'nym chlenom AMN SSSR V.M.
Karasikom.

(ADRENOCORTICAL HORMONES)
(RIGOR MORTIS)

MARKOVA, I.V.

Sorption properties of brain tissue in newborn and adult rats. Biul.
eksp. biol. i med. 52 no.8:110-111 Ag '61. (MIRA 15:1)

1. Iz kafedry farmakologii (zav. - deystvitel'nyy chlen AMN SSSR
V.M.Karasik) Leningradskogo meditsinskogo pediatriceskogo instituta.
Predstavlena deystvitel'nym chlenom AMN SSSR V.M.Karasikom.
(BRAIN)

MARKOVA, I.V. (Leningrad)

Significance of the adreno-pituitary system for the function of the
hematoencephalic barrier. Usp.sovr.biol. 53 no.3:347-363 My-Je '62.
(MIRA 15:9)

(BRAIN) (ADRENAL CORTEX) (CAPILLARIES—PERMEABILITY)
(PITUITARY BODY)

MARKOVA, I.V.

Potentiation with phenamine and the prevention of reserpine
intoxication with aminazine in rats. Biul.eksp.biol.i med. 54
no.7:49-51 Jl '62. (MIRA 15:11)

1. Iz kafedry farmakologii (zav. - deystvitel'nyy chlen AMN SSSR
V.M.Karasik) Leningradskogo meditsinskogo pediatriceskogo instituta.
Predstavlena deystvitel'nym chlenom AMN SSSR V.M.Karasikom.
(PHENAMINE) (RESERPINE—TOXICOLOGY) (CHLORPROMAZINE)

MARKOVA, I.V.

Use of mineral corticoids in the prevention of the toxic effects of phenamine and adrenaline in adrenalectomized rats. Farm. i toks. 26 no.2:201-205 Mr-Ap '63. (MIR 17:8)

I. Kafedra farmakologii (zav. - deyatel'nyy chlen AMN SSSR prof. V.M. Karasik) Leningradskogo pediatricheskogo meditsinskogo instituta.

MARKOVA, I.V.

Prevention of curare convulsions and paralysis with the use of a quaternary ammonium compound mespenal in adrenalectomized rats.
Farm. i toks. 27 n°.1:36-42 Ja-F '64.

(MIRA 17:11)

I. Kafedra farmakologii (zav. - deystvitel'nyy chlen AMN SSSR prof. V.M. Karasik) Leningradskogo meditsinskogo pediatriceskogo instituta.

MARKOVA, J.

CZECHOSLOVAKIA

Capt Josef JANICEK CSc DVH, Vilma KALUSOVA RNDr, M. VLCKOVA and J.
MARKOVA, Veterinary Research Center (Veterinarni vyzkumne stredisko),
Prague.

"Preservation of Meat o. Edible Animals from Secondary Effects of
Atomic Radiation."

Prague, Vojenske Zdravotnické Listy, Vol 31, No 3, Jun 62; pp 129-135.

Abstract: Comprehensive review of various food preservatives and report
on chlortetracycline studies i.v. to rabbits at 4 mg./Kg optimal time
for meat preservation protection is 2 to 3 hours antemortem; same type
of experiments in heifers in Prague slaughterhouse, determining amount of
antibiotic in tissues at various times after slaughtering; microbiologic
assay was most sensitive; second part of study devoted to plastic fiber
jackets for wrapping slaughtered cattle. In terms of mg. NH₃% best was
i.p. chlortetracycline + rinsing in same antibiotic + fiber wrap. Two
photographs, 2 tables, 4 graphs; 1 Czech and 15 Western references.

1/1

MARKOVA, Jaroslava, MUDr.

Parallels between shock and stroke. Neur. psychiat. cesk.
18 no.4:281-287 July 55.

1. Z Neurologickeho oddeleni pro cevni onemocneni mozku v
Thomayerove nemocnici v Krci, primar doc. J. Budinova-Smela.
(CEREBRAL HEMORRHAGE, physiology
comparison with shock)
(SHOCK, physiology
comparison with cerebral hemorrh.)

MARKOVA, Jaroslava, MUDr

Differential diagnosis of various apoplectic attacks and first aid.
Prakt.lek., Praha 35 no.8:169-172 20 Apr 55.

1. Neurolog. odd. pro cevni onem. mozku, Praha-Krc, prednosta doc.
Budinova-Smela.
(CEREBRAL HEMORRHAGE,
differ. diag. & first aid)

MARKOVA, J. (Praha 12, Bratri Capku 24)

2 Cases of temporary hemiparesis following cerebral arteriography.
Cesk. neur. 21 no. 4:287-288 July 58.

1. Neurologicke oddeleni pro cevni mozku, Thomayerova nemocnice, pred-
nosta doc. Dr. K. Jirina Budinova-Smela.

(ANGIOGRAPHY, CEREBRAL, compl.
temporary hemiparesis caused by cerebral arteriography,
case reports (Cz))

(HEMIPLEGIA, etiol. & pathogen.
cerebral arteriography causing temporary hemiparesis,
case reports (Cz))

PELESKA, Bohumil; MARKOVA, Jaroslava, Technicka spoluprace M. Rebl, M. Veselovska

Effect of pentamethonium & arfonad on the excitability of the
cerebral motor cortex. Rozhl. chir. 38 no.6:381-388 June 59.

I. Ustav klinicke a experimentalni chirurgie, Praha.
(AUTONOMIC DRUGS, pharmacol.)
(METHONIUM COMPOUNDS, pharmacol.)
(CEREBRAL CORTEX, pharmacol.)

KESZLER, H.; MARKOVA, J.

Cerebral edema due to unusual causes. Cas. lek. cesk. 98 no.28:
877-883 10 July 59.

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H. K., Praha-Krc, Budejovicka 800.

(EDEMA

cerebral, due to unusual causes, review (Cz))

(BRAIN, dis.

edema due to unusual causes, review (Cz))

PELESKA, B.; MARKOVA, J.; technical assistance: RABL, N.; VESELOWSKA, M.

"Kortikostimulator Prema" - an electronic stimulator for exciting
the cerebral cortex. Rev.Czech. M.6 no.4:266-277 '60.

1. Institute for Clinical and Experimental Surgery, Prague -
Kcr. Director: Prof. B. Spacek, M.D.
(CEREBRAL CORTEX)
(ELECTRONICS)

PELESKA, B.; MARKOVA, J. Technicka spoluprace: RAHL, M.; VESELOVSKA, M.

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1. Ustav klinicke a experimentalni chirurgie, Praha-Krc, prednosta prof. dr. B. Spacek.

(THIOPENTAL anesth & analgesia)
(CEREBRAL CORTEX physiol)
(PERIPHERAL NERVES physiol)

KRATKOVA, E.; MARKOVA, J.; PECHAR, J.

Agammaglobulinemia. Cas. Lek. Cesk. 101 no.8:238-242 23 F '62.

1. Detske interni oddeleni Thomayerovy nemocnice v Praze-Krci, prednosta
MUDr. E. Kratkova, Ustav klinicke a experimentalni chirurgie v Praze-
Krci, reditel prof. dr. B. Spacek, Ustav pro vyzkum vyzivy lidu v Praze-
Krci, reditel prof. dr. J. Masek.

(AGAMMAGLOBULINEMIA in adolescence)

CLINICAL CARDIOLOGY
HANCOVÁ, J., PAVLOVÁ, B., and HESSLER, H., Institute for Clinical
and Experimental Surgery (Oliverová-Hančová, Dr experimentalni chir-
rurgie), Prague, Prof. Dr S. Šírovský, Dr of Sciences, director.
"Neurological Picture of C.S Damage Following Cardiac Arrest
During Surgical Operations"
Prague, Československá Lékařská, Vol 24(59), No 4, July 1959,
pp 252-256.

Abstract [Authors' English translation]: The development and dynamics
of disorders in the central nervous system following cardiac arrest
during surgery are evaluated. Of 24 patients five survived a
severe and fatal damage, three recovered from transient damage.
Cases described were selected to prove that even severe disorders
of C.S may be restored to normal. Methods of treatment described
stress the use of antifibrillatory and hypnotic therapy.
Experience based on the evaluation of neurological findings allows
certain prognostic estimates of the extent of the C.S damage.
Improvement proceeds from areflexia through a complex picture
including 13 Czech and 2 Russian.

1/1

RDP86-00513R00103251

Diagnosis

CZECHOSLOVAKIA

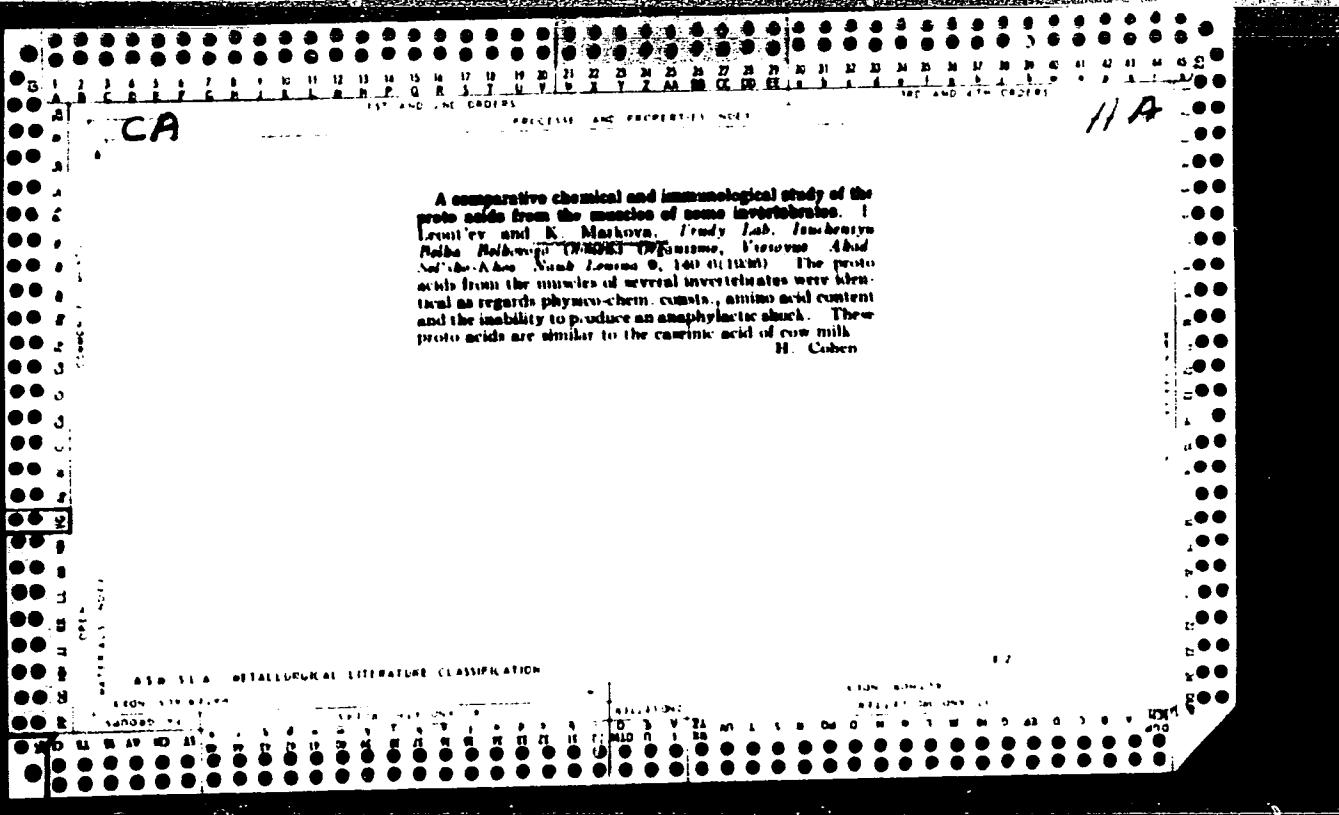
MARKOVA, J.; POKORNY, F.; Department for Physical Therapy, Thomas' Hospital (Fyzikalne Terapeutické Oddelení Thomayerovy Nemocnice), Prague - Krc; Institute for Electrical Technology and Modelling Technique in Medicine (Ustav pro Elektrotechniku a Modelovani v Lekarstvi), Prague, Head (Prednosta) Docent Dr B. PeLESKA.

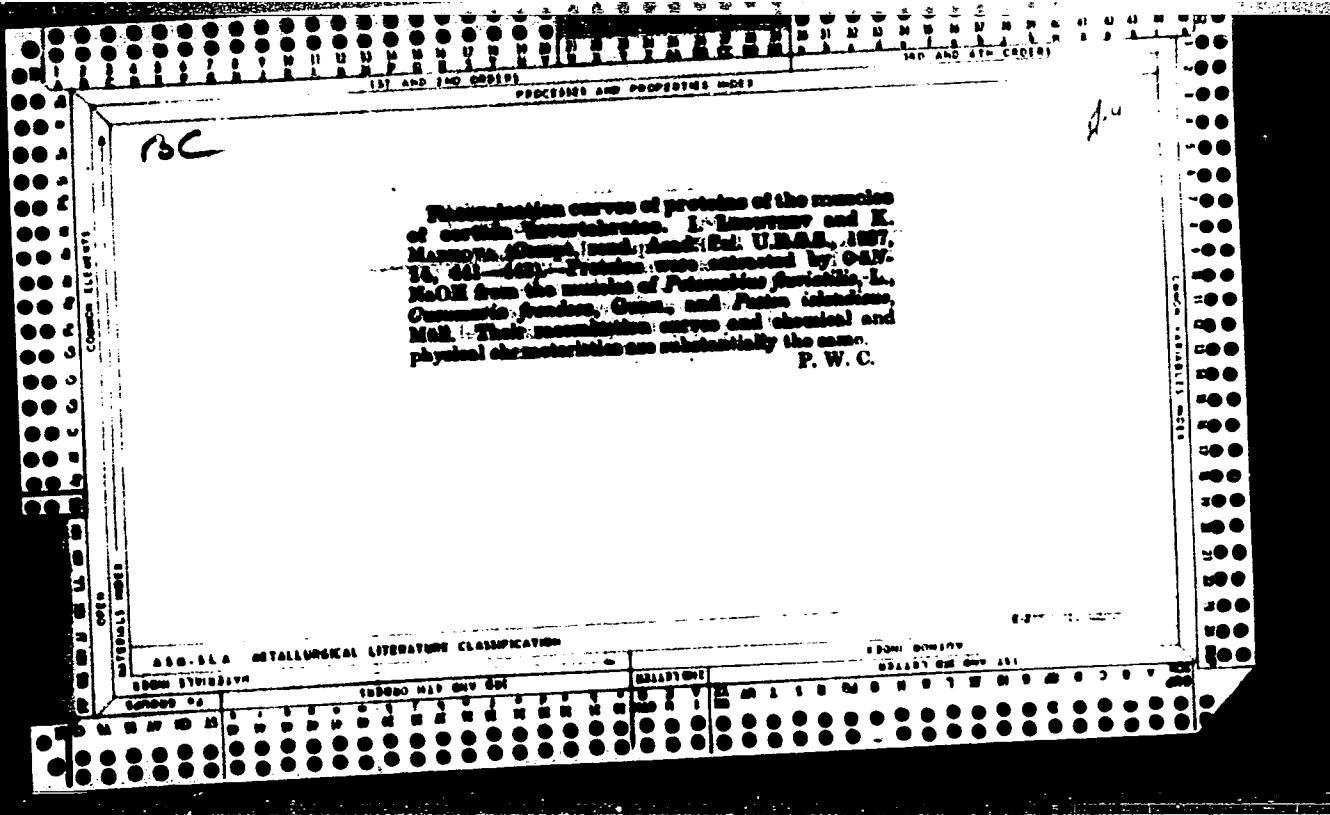
"Echoencephalographic Diagnostic Methods Based on Ultrasonic Devices."

Prague, Casopis Lekaru Ceskych, Vol 105, No 23, 10 Jun 66, Lekarska Veda v Zahranici, pp 112 - 117

Abstract: Use of bariumtitanate, lithiumsulfate, and quartz crystals in medical ultrasonic devices is described. A-scanning and B-scanning are discussed. Intracranial parts where ultrasonic diagnostic methods can be used are described and the reliability of the results obtained by this method is evaluated. Best method for the diagnosis of tumors is discussed. Use of ultrasonic devices for the location of very small objects is described. 2 Figures, 54 Western, 9 Czech, 1 Polish, 1 Japanese, 1 East German reference.

1/1





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Kolkhoznyye molochnyye laboratori. Moloch, prom-st', 1949, No 12,
s. 35-36

1. MARKOVA, K., POPOV, B.
2. SSSR (600)
4. Milk Supply
7. Work in the area supplying raw milk.
Mol. prom 13 No. 11, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

Markova, K.

Feeding of sugar beets to cows and the composition of milk. N. Markova, A. Al'man, and E. Simon. *Zhurn. zhivotnovodstva*, 1951, No. 9, 38-9 (1951).—A study was made to ascertain the effects in the ration of cows of sugar beets (I) and potatoes (II) on production of milk (III) and fat (IV), and on quality of butter. The data show that III and IV were not affected uniformly by feeding of I and II. When I and II were fed to brown Latvian high-fat milk-producing cows at the rate of 20-30 and 16-22 kg. per day, resp., III increased by 2 and 0.7 kg. per day, but IV increased 0.11 and decreased 0.02 kg. per 100 ml. of III in each case. However, feeding of 35 and 30 kg. of I and II, resp., to Kholmogor and Kholmogor-Ost. Pribaltic low-fat milk-producing cows lessened III, resp., 3.8 and 2.0 kg., and increased IV 0.25 and 0.1 x. per 100 ml. of III. On the basis of the work of others, it is concluded that high-fat-producing cows respond more effectively to I in the ration than those with low-fat production. An inverse relation was also observed between the seasonal temp. and III and IV. The avg. size of the fat globules was appreciably reduced by I, and was affected but slightly by II. Butter made from III produced on diets with I and II was of high quality. I butter was somewhat harder than II butter with higher sapon. no. and lower iodine no. Vladimir N. Kravkovskiy

MARKOVA, Klavdiya Danilovna; SHKOL'NIKOVA, Yelizaveta Fedorovna;
BEL'KOVICH, A.V., red.; ANTSELOVICH, K.I., tekhn. red.

[Technology of the refrigeration of food products] Kholodil'-
naya tekhnologiya pishchevykh produktov. Moskva, Gostorgizdat,
(MIRA 15:11)
1962. 156 p.
(Food—Preservation) (Cold storage)

LIVSHITS, P.Yu.; LOPATIN, V.S.; MARKOVA, K.G.; ROGOV, M.A.

Electronic device for moisture measurement in PIV retted flax
tow. Tekst. prom. 25 no. 3:70-71 Mr '65. (MIPA 18:5)

1. Vedushcheye inzhinery Leningradskogo spetsial'nogo
konstruktorskogo byuro tekstil'noy promyshlennosti (for
Livshits, Lopatin, Markova). 2. Glavnnyy konstruktor
Leningradskogo spetsial'nogo konstruktorskogo byuro
tekstil'noy promyshlennosti (for Rogov).

AUTHOR
TITLE

MARKOVA, K.I., SHEMYAKIN, E.I.

PA - 2207

The Propagation of Unsteady Disturbances in a Liquid Layer which is in Contact with an Elastic Half-Space (Rasprostraneniye nestatsionarnykh vozmushcheniy v sloye zhidkosti, nakhodyashchemsya v kontakte s uprugim poluprostranstvom).

PERIODICAL

Prikladnaia Matematika i Mekhanika, 1957, Vol 21, Nr 1, pp 57-66(U.S.S.R.)

Reviewed 4/10/57

ABSTRACT

Received 3/1957
The present paper deals with the linear investigation of the problem of the propagation of pressure waves in a layer of liquid resting upon an elastic half-space. Such waves can e.g. be produced by a spark discharge in water. The liquid layer investigated in the present instance, which has two boundary surfaces, is characterized by 2 parameters, ρ^0 - the density of the undisturbed liquid, and $1/c^0$ - the velocity of sound. The medium located below the lower boundary surface is characterized by the parameters λ , μ , and ρ . At $t = 0$ the entire system is assumed to be at rest, and at the moment $t = 0$ a source of the type of an "expansion center" begins to act at the point ($r = 0$, $z = -H$). The waves propagating here from the source reach the free surface and the boundary surface and they then produce a complicated field of waves of pressures within the liquid layer. This problem is here subdivided into the following 2 problems. 1) Reflection of the pressure wave on the free surface. 2) Reflections of the pressure waves on the elastic half-space. The mathematical solution of both part-problems is discussed in detail. The solution found is written down, it rigorously satisfies the equation as well as

Card 1/2

PA - 2207

The Propagation of Unsteady Disturbances in a Liquid Layer which is in Contact with an Elastic Half-Space.

the conditions made.

There follows the discussion of the solution. Here the line integral contained in the solution in the complex ζ -plane is investigated. These investigations are carried out as follows. First, the field is computed at certain points by means of the residuum method, on which occasion the original contour is deformed. Next, the line integral is computed by approximation methods. The integrals occurring here are also computed by the method of the stationary phase. The following general wave picture results in the liquid layer. Two conical waves move in the direction of the observer at point (r,z) , viz. an incoming and a reflected wave. If, however, the observer is near the line of separation between the liquid and the elastic medium, also the pressure waves produced by the "surface wave" move in his direction. The times of the arrival of these waves can be computed by means of the formulae found here. (7 illustrations)

ASSOCIATION Institute for Chemical Physics of the Academy of Science of the U.S.S.R.
PRESENTED BY
SUBMITTED 4. 7. 1956
AVAILABLE Library of Congress

Card 2/2

MARKOVA, K. P.

"Study of the Function of the Vestibular Analysor in Chronic Suppurative Otitides."
Originated by the Chair of Ear, Throat, and Nose Diseases of the Leningrad Pediatric
Medical Inst., Leningrad, 1955. (Dissertation for the Degree of Candidate in
Medical Sciences)

SO: Knizhnaya Letopis', No. 22, 1955, pp 93-105

MARKOVA, K.P., aspirant

~~Disorders of function of the vestibular analyzer in suppurative otitis media. Vest. oto-rin. 17 no.5:38-41 S-O '55.~~ (MIRA 9:2)

1. Is kafedry bolezney ukha, gorla i nosa (zav. prof. D.M. Rutenburg) Leningradskogo pediatricheskogo meditsinskogo instituta.
(OTITIS MEDIA, pathology.
vestibular appar.)
(VESTIBULAR APPARATUS, in various diseases,
otitis media)

MARKOVA, K.P., kand.med.nauk

Hearing function in children after tympanoplasty [with summary
in English]. Vest.oto-rin. 20 no.5:44-48 S-O '58 (MIRA 11:12)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. - prof. D.M.
Rutenburg) Leningradskogo pediatricheskogo meditsinskogo instituta
(OTITIS MEDIA, surgery
tympanoplasty in child., postop. hearing acuity (Rus))
(HEARING TESTS,
audiometry in child. before & after tympanoplasty
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MARKOVA, K.P., kand.med.

Study of hearing by means of an acoustic sound in patients following tympanoplasty. Vest.otorin. no.6:72-75 '61. (MIRA 15:1)

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(TYPANIC MEMBRANE—SURGERY) (HEARING—TESTING)

MARKOVA, K.P., kand.med.nauk

Late results of tympanoplasty as revealed by data of speech audiometry.
Zhur. ush., nos. i gorl. bol. 21 no.1:25-29 Ja-F '61.

(MIRA 14:6)

1. Is kliniki bolezney ukha, gorla i nosa (zav. - prof. D.M.Rutenburg)
Leningradskogo pediatriceskogo meditsinskogo instituta.
(EAR—SURGERY) (AUDIOLOGY)

MARKOVA, K.P., kand. med. nauk

Late results of tympanoplasty in children. Vestn. otorinolaring.
25 no.3:105-163 (MIRA 1981)

1. Iz kliniki bolezney ucha, gorla i nosa (zav. - prof. D.M. Rutenburg [deceased]) Leningradskogo pediatricheskogo meditsinskogo instituta.

FEDOROV, V.D.; GUSEV, M.V.; SOKOLOV, L.I.; SOLIVO-DOBROVOL'SKIY, L.B.;
KOPIROVSKIY, K.M.; SHLENOVA, G.S.; CHAYKIN, I. Ya.;
RAZNOSHCHIK, V.V.; SPANOVSKAYA, V.D.; GRIGORASH, V.A.;
MARKOVA, K.P.; MAKSIMOV, V.N.; TELITCHENKO, M.M.; LEVSHINA,
N.A.

Supplement. V.D.Fedorov and others. Biul. MOIP. Otd. biol.
69 no. 3:158-166 My-Je '64. (MIRA 17:7)

"APPROVED FOR RELEASE: 06/14/2000

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MANAMA, KUWAIT

Foreign Economic Affairs Bureau

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001032510012-6"

MARKOVA-K.

Effect of green feed on the quality of milk. K. V. Markova, A. D. Al'tman, and V. B. Korshunov. Zoologicheskii zhurnal, No. 2, 1953, p. 14910. Feeding cows grass-legume mixes affects favorably the quality of milk, increasing the fat and protein content. The fat of milk increased when vetch and oats, clover and timothy grass, and similar mixes, were fed. Highest protein content was obtained by feeding vetch and oats. In order to increase the food value of milk, it is necessary to incorporate into the feed mixes, of grasses and legumes. Various kinds of green feed did not affect the Ca, K, vitamin C, and ash content of the milk. M. Hosen.

MARKOVA, K.V., kandidat biologicheskikh nauk; AL'TMAN, A.D., kandidat biologicheskikh nauk.

Is your dairy farm delivering good milk? Nauka i pered. op. v sel'khoze
? no. 4:19-21 Ap '57. (MLRA 10:6)
(Dairying--Equipment and supplies)

AL'TMAN, A.D., kand.biolog.nauk; MARKOVA, K.V., kand.biolog.nauk;
NOVIKOVA, A.F.

Composition of milk obtained from cows of the livestock section
of the agricultural experiment center in Gorki Leninskiye.. Agro-
biologiya no.6:913-919 N-D '60. (MIRA 13:12)

1. Vsescyuznyy nauchno-issledovatel'skiy institut zhivotnovodstva,
g. Moskva.

(Gorki Leninskiye—Agricultural experiment stations)
(Milk—Composition)

USSR / Forest Science. Forest Management.

K-3

Abs Jour : Rof. Zhur v Biologiya, No 17, 1958, No. 77504

Author : Markova, K. Ya.

Inst : Not given

Title : On the Utilization of the Forest Reserves of Belarusia

Orig Pub : Lesn. zh-vo, 1958, No 2, 40-43

Abstract : No abstract given

Card 1/1

19